

WHAT IS CLAIMED IS:

1. An oblique contact double row ball bearing comprising double rows of balls axially interposed in between raceways of inner and outer rings, wherein

5 an inner clearance between the balls in one of the rows and the raceway in which the balls are rolled and an inner clearance between the balls in the other row and the raceway in which the balls are rolled, are different to each other.

2. The oblique contact double row ball bearing according
10 to Claim 1, wherein the inner clearance is a radial clearance.

3. The oblique contact double row ball bearing according to Claim 1, wherein pitch circle diameters of the both rows are different to each other.

4. The oblique contact double row ball bearing according
15 to Claim 1, wherein a contact angle of the ball in one of the rows and a contact angle of the ball in the other row have a same direction.

5. A method of imparting a preload to an oblique contact double row ball bearing in which double rows of balls are arranged
20 in between raceways of inner and outer rings with inner clearances, wherein

the inner clearance between the balls in one of the rows and the raceway of the inner and outer rings corresponding to the one of the rows in which the balls are rolled, and the inner
25 clearance between the balls in the other row and the raceway of the inner and outer rings corresponding to the other row in which the balls are rolled are set to be different to each other, and then

a load is given to the inner and outer rings so that the
30 inner clearances are sequentially reduced in order to impart the preload to the inner and outer rings.

6. The method of imparting the preload to the oblique contact double row ball bearing according to Claim 5, wherein

the inner clearance is a radial clearance, and
a thrust load is given to the inner and outer rings in
order to impart the preload.

7. The method of imparting the preload to the oblique contact
5 double row ball bearing according to Claim 5, wherein
pitch circle diameters of the double rows are different
to each other.

8. The method of imparting the preload to the oblique contact
double row ball bearing according to Claim 5, wherein
10 a contact angle of the ball in one of the rows and a contact
angle of the ball in the other row have a same direction.